

STATE OF MISSISSIPPI HAZARDOUS WASTE MANAGEMENT PERMIT

THIS CERTIFIES THAT

International Paper Company- Closed Former Wood Treating Site Units
South First Street
Wiggins, MS
Stone County
MSD 980 600 084

is hereby authorized to conduct post closure care for closed surface impoundments and land treatment unit.

This permit is issued under the authority of the Mississippi Solid Wastes Disposal Law, and particularly Section 17-17-27 thereof, and rules adopted and promulgated thereunder, all of which authorize the Department of Environmental Quality to enforce all applicable requirements, under the Mississippi Hazardous Waste Management Regulations, and associated conditions included therein.

Permit Issued: **MAY 04 2010**

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD



AUTHORIZED SIGNATURE

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No.: HW-980-600-084

Expires: APRIL 30, 2020

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Attachment B	POST-CLOSURE PLAN
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Attachment D	GROUND WATER MONITORING PLAN

MODULE 1 – GENERAL PERMIT CONDITIONS

I.A. EFFECT OF PERMIT

The Permittee is authorized to conduct treatment of hazardous waste in accordance with the conditions of this permit. Any storage, treatment, and/or disposal of hazardous waste not authorized in this permit are prohibited. Subject to MHWMR 270.4, compliance with this permit constitutes compliance, for purposes of enforcement, with Subtitle C of the Resource Conservation and Recovery Act (RCRA). Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, and invasion of other private rights, or any infringement of state or local law or regulations or preclude compliance with any other Federal, State, and/or local laws and/or regulations governing the treatment and handling of explosives. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3008(a), Section 3008(h), Section 3013, or Section 7003 of RCRA; Sections 106(a), 104 or 107 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9601 *et seq.*, commonly known as CERCLA) or any other law providing for protection of public health or the environment.

I.B. PERMIT ACTIONS

I.B.1 Permit Modification, Revocation and Reissuance, and Termination

This permit may be modified, revoked and reissued, or terminated for cause as specified in MHWMR Part 270.41; 270.42; 270.43; and 270.50(d). The filing of a request for a permit modification, revocation and reissuance or termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit conditions.

I.B.2 Permit Renewal

This permit may be renewed as specified in MHWMR 270.30(b) and Permit Condition I.E.2. Review of any application for a permit renewal shall consider improvements in the state of control and

measurement technology, as well as changes in applicable regulations.

I.C. SEVERABILITY

The provisions of this permit are severable, and if any provisions of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

I.D. DEFINITIONS

For purposes of this permit, terms used herein shall have the same meaning as those in MHWMR Parts 124, 260, 264, 268 and 270, unless this permit specifically provides otherwise; where terms are not defined in the regulations or the permit, the meaning associated with such terms shall be defined by a standard dictionary or the generally accepted scientific or industrial meaning to the term. "Executive Director" means the Executive Director of MDEQ, or his designated or authorized representative.

I.E. DUTIES AND REQUIREMENTS

I.E.1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of RCRA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

I.E.2. Duty to Reapply

If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee shall submit a complete application for a new permit at least 180 days prior to permit expiration.

I.E.3. Permit Expiration

Pursuant to MHWMR Part 270.50, this permit shall be effective for a fixed term not to exceed ten years. This permit and all conditions herein will remain in effect beyond the permit's expiration date, if the Permittee has submitted a timely, complete application and, through no fault of the Permittee, the Executive Director has not issued a new permit, as set fourth in MHWMR 270.51.

I.E.4. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

I.E.5. Duty to Mitigate

In the event of noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

I.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate staffing and training, adequate laboratory and process controls, including appropriate quality assurance/quality control procedures. This provision requires the operation of backup or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

I.E.7. Duty to Provide Information

The Permittee shall furnish to the Executive Director, within a reasonable time, any relevant information which the Executive

Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish the Executive Director, upon request, copies of records required to be kept by this permit.

I.E.8. Inspection and Entry

Pursuant to MHWMR 270.30(i), the Permittee shall allow the Executive Director, or an authorized representative, upon the presentation of credentials and other documents, as may be required by law, to:

- I.E.8.a. Enter, at reasonable times, upon the Permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;
- I.E.8.b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- I.E.8.c. Inspect at reasonable times any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- I.E.8.d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

I.E.9. Monitoring and Records

The Executive Director may require such testing by the Permittee, and may make such modifications to this permit, deemed necessary to ensure implementation of new regulations or requirements, or to ensure protection of human health and the environment.

- I.E.9.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the wastes to be analyzed must be the appropriate method from Appendix I of MHWMR Part

261, the EPA Region 4 Field Branches Quality System and Technical Procedures (SOP) (most recent version), or an equivalent method approved by the Executive Director. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, Standard Methods of Wastewater Analysis, or an equivalent method approved by the Executive Director.

- I.E.9.b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records, records of all data used to prepare documents required by this permit, copies of all reports and records required by this permit, the certification required by MHWMR 264.73(b)(9), and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report, record, certification, or application. These periods may be extended by the Executive Director at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility. The Permittee shall also maintain records for all groundwater monitoring wells and associated groundwater surface elevations for the duration of the post-closure care period. All records required by this condition shall be maintained at a site agreed upon by MDEQ and the Permittee.
- I.E.9.c. Records of monitoring information shall specify:
- i. The dates, exact place, and times of sampling or measurements;
 - ii. The individuals who performed the sampling or measurements;
 - iii. The dates the analyses were performed;
 - iv. The individuals who performed the analyses;
 - v. The analytical techniques or methods used; including any method detection limits for said technique; and

vi. The results of such analyses

I.E.10. Reporting Planned Changes

The Permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility.

I.E.11. Anticipated Noncompliance

The Permittee shall give advance notice to the Executive Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

I.E.12. Transfer of Permits

This permit is not transferable to any person, except after notice to the Executive Director. The Executive Director may require modification or revocation and reissuance of the permit pursuant to MHWMR 270.40. Before transferring ownership or operation of the facility, the Permittee shall notify the new owner or operator in writing of the requirements of MHWMR Parts 264 and 270 and of this permit.

I.E.13. Twenty-Four Hour Reporting

I.E.13.a. The Permittee shall report to the Executive Director any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:

- i. Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supplies.
- ii. Any information of a release or discharge of hazardous waste, or of a fire or explosion from the hazardous waste management facility which could threaten the environment or human health outside the facility.

I.E.13.b. The description of the occurrence and its cause shall include:

- i. Name, address, and telephone number of the owner or operator;
- ii. Name , address, and telephone number of the facility;
- iii. Date, time, and type of incident;
- iv. Name and quantity of materials involved;
- v. The extent of injuries, if any;
- vi. An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and
- vii. Estimated quantity and disposition of recovered material that resulted from the incident.

I.E.13.c. A written submission shall also be provided within five days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Executive Director may waive the five-day written notice requirement in favor of a written report within 15 days.

I.E.14. Other Noncompliance

Whenever the Permittee becomes aware that it failed to submit any relevant facts or submitted incorrect information in any document(s) submitted to the Executive Director, the Permittee shall promptly submit such facts or information.

I.E.15. Obligation for Corrective Action

The Permittee is required to continue this permit for any period necessary to comply with the corrective action requirements of this permit.

I.F. SIGNATORY REQUIREMENT

All applications, reports, or information submitted to the Executive Director shall be signed and certified in accordance with MHWMR 270.11.

I.G. REPORTS, NOTIFICATIONS, AND SUBMISSIONS TO THE EXECUTIVE DIRECTOR

All reports, notifications, or other submissions which are required by this permit to be sent to or given to the Executive Director should be sent by certified mail or given to:

Mississippi Department Of Environmental Quality
P.O. Box 2261
Jackson, MS 39225

Delivery Address:
515 E. Amite Street
Jackson, MS 39201

I.H. CONFIDENTIAL INFORMATION

In accordance with MHWMR Part 270.12, the Permittee may claim confidential any information required to be submitted by this permit.

MODULE II – GENERAL FACILITY CONDITIONS

II.A. FACILITY DESCRIPTION

This permit is issued to International Paper Company for the closed RCRA units at the former Wiggins Treated Wood Products Facility [MSD 980 600 084] as described in the permit renewal application submitted on February 5, 2008, and hereinafter referred to as “the application.” The permit authorizes the Permittee to conduct post closure care and to conduct groundwater remediation activities for the closed surface impoundments and landfarm as described in Permit Attachment A, and as shown in Figure B-2. The groundwater remediation system also serves to remediate any releases to groundwater from other units not regulated by this permit, such as the closed sludge pits.

II.B. DESIGN AND OPERATION OF FACILITY

The Permittee shall maintain and operate the facility to minimize the possibility of fire, explosion, or any unplanned, sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment, as required by MHWMR 264.31.

II.C. REQUIRED NOTICES

II.C.1. Hazardous Waste Imports

The Permittee shall not receive hazardous waste from a foreign source.

II.C.2. Hazardous Waste from Off-Site Sources

The Permittee shall not receive hazardous waste from an off-site source.

II.C.3. Transfer of Permit

Before transferring ownership or operation of the facility, the owner or operator must notify the new owner or operator in writing of the requirements of MHWMR Parts 264 and 270.

II.D. SECURITY

The Permittee shall comply with the security provisions of MHWMR Section 264.14(b)(2) and (c).

II.E. GENERAL INSPECTION REQUIREMENTS

The Permittee shall comply with the inspection requirements of MHWMR Section 264.15 and follow the inspection schedule contained in Permit Attachment B.

II.F. RESERVED

II.G. SPECIAL CONDITIONS

Where a discrepancy exists between the wording of an item in the application and this permit, the permit requirements take precedence over the application.

II.H LOCATION STANDARD

The facility is not located in an area described by MHWMR 264.18(a).

II.I. GENERAL POST-CLOSURE REQUIREMENTS

II.I.1. Post-Closure Care Period

In accordance with MHWMR 264.117(a)(2)(ii), the Executive Director has determined that the post-closure period shall be extended, and upon permit issuance the post-closure period shall be a 30 year rolling total, until such time that the Executive Director determines that a reduced period is sufficient to protect human health and the environment.

II.I.2. Amendment to Post-Closure Plan

The Permittee shall request a permit modification and amend the post closure plan, whenever necessary, in accordance with MHWMR Section 264.118(d).

II.I.3. Post-Closure Notices

The Permittee shall request and obtain a permit modification prior to the post-closure removal of hazardous wastes, hazardous waste residues, liners or containment soils in accordance with MHWMR 264.119(c).

II.I.4. Certification of Completion of Post-Closure Care

The Permittee shall certify that post-closure care was performed in accordance with the specifications in the Post-Closure Plan, Permit Attachment B, as required by MHWMR 264.120.

II.J. COST ESTIMATE FOR FACILITY POST-CLOSURE

- II.J.1. The Permittee's most recent post-closure cost estimates, prepared in accordance with MHWMR 264.142, 264.144, 264.280, are specified in Permit Attachment [B](#).
- II.J.2. The Permittee must revise the post-closure cost estimate as needed when there is a change in the facility's post-closure plan.
- II.J.3. The Permittee must keep the latest post-closure cost estimate at a site mutually agreeable to the Permittee and MDEQ as required by MHWMR Section 264.144(d).

II.K. FINANCIAL ASSURANCE FOR FACILITY POST-CLOSURE

The Permittee shall demonstrate continuous compliance with MHWMR 264.145 by providing documentation of financial assurance, as required by MHWMR Section 264.151 or 264.149, in at least the amount of the cost estimate required by Condition II.J. Changes in financial assurance mechanisms must be approved by the Executive Director pursuant to MHWMR Section 264.145.

II.L. OPERATING RECORD

Pursuant to MHWMR Part 264.73(a), the Permittee must keep a written operating record of post-closure care activities and those activities specified in MHWMR Part 264.73(b)(6) and 264.280(c). These records will be maintained at a location to be agreed upon by the Permittee and MDEQ and shall be made available upon request.

II.M. INCAPACITY OF OWNERS OR OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

The Permittee shall comply with MHWMR 264.148 whenever necessary.

MODULE III – POST-CLOSURE CARE

III.A. APPLICABILITY

The Permittee shall provide post-closure care for the following closed units: the land treatment demonstration unit, the penta recovery pond, the cellon recovery pond, the creosote recovery pond, and the contact cooling pond, as described in Attachment A and depicted in Figure B-2, subject to the terms and conditions of this permit.

III.B. POST-CLOSURE CARE PERIOD

Post-Closure care for the units identified in Permit Condition III.A shall continue throughout the effective period of this permit as specified in MHWMR 264.117(a)(1), unless otherwise modified under MHWMR 264.117(a)(2).

III.C. POST-CLOSURE PROCEDURES AND USE OF PROPERTY

III.C.1. The Permittee shall maintain and monitor the ground-water monitoring system and comply with all other applicable requirements of MHWMR 264, Subpart F during the post-closure period.

III.C.2. During the post-closure period, the Permittee shall:

III.C.2.a. Maintain the integrity and effectiveness of the final cover, including making repairs to the cap, as necessary, to correct the effects of settling, subsidence, erosion and other events;

III.C.2.b. Maintain drainage control structures, benchmarks, and security devices,

III.C.3. The Permittee shall maintain the fencing around the closed units as a security measure.

III.C.4. The Permittee shall not allow any use of the units designated in Condition III.A. which might disturb the integrity of the final cover, or the function of the facility's monitoring system, during the post-closure care period.

- III.C.5. The Permittee shall implement the Post-Closure Plan, Permit Attachment B. Post-closure care activities shall be implemented in accordance with the provisions of the Post-Closure Plan and the provisions of this permit.

III.D. INSPECTIONS

The Permittee shall inspect the components, structures, and equipment at the site in accordance with the Inspection Schedule in the Post-Closure Plan, Permit Attachment B.

III.E. NOTICES AND CERTIFICATION

- III.E.1. If the Permittee or any subsequent owner or operator of the land upon which the hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, or contaminated soils, then he shall request a modification to this post-closure permit in accordance with the applicable requirements in MHWMR Parts 124 and 270. The Permittee or any subsequent owner or operator of the land shall demonstrate that the removal of hazardous wastes will satisfy the criteria of MHWMR 264.117(c).
- III.E.2. No later than sixty (60) days after completion of the established post-closure care period for each disposal unit, the Permittee shall submit to the Executive Director, by registered mail, a certification that the post-closure care for the hazardous waste disposal unit was performed in accordance with the specifications in the approved Post-Closure Plan. The certification must be signed by the Permittee and an independent, professional engineer registered in the State of Mississippi. Documentation supporting the independent, professional engineer's certification must be furnished to the Executive Director upon request until the Executive Director releases the Permittee from the financial assurance requirements for post-closure care under MHWMR 264.145(1).

III.F. FINANCIAL ASSURANCE

- III.F.1. The Permittee shall maintain financial assurance during the post-closure period and comply with all applicable requirements of MHWMR 264, Subpart H.
- III.F.2. The Permittee shall demonstrate to the Executive Director that the value of the financial assurance mechanism exceeds the remaining

cost of post-closure care, in order for the Executive Director to approve a release of funds, if applicable.

- III.F.3. The Permittee shall submit itemized bills to the Executive Director when requesting reimbursement for post-closure care, if applicable.

III.G. POST-CLOSURE PERMIT MODIFICATIONS

The Permittee must request a permit modification to authorize a change in the approved Post-Closure Plan. This request must be made in accordance with applicable requirements of MHWMR Parts 124 and 270, and must include a copy of the proposed amended Post-Closure Plan for approval by the Executive Director. The Permittee shall request a permit modification whenever changes in operating plans or facility design affect the approved Post-Closure Plan, or other events occur that affect the approved Post-Closure Plan. The Permittee must submit a written request for a permit modification at least 60 days prior to the proposed change in facility design or operation, or no later than 60 days after an unexpected event has occurred which has affected the Post-Closure Plan.

MODULE IV – CORRECTIVE ACTION FOR REGULATED UNITS

IV.A. APPLICABILITY

The requirements of this subpart apply to the units as specified in Condition III.A. in accordance with MHWMR 264.100.

IV.B. CORRECTIVE ACTION PERIOD

IV.B.1. The Permittee shall conduct corrective action measures specified in this permit and the Corrective Action Program Plan, Permit Attachment C, until the ground water protection standard for all constituents have not been exceeded for a period of three consecutive years at the point of compliance and in all compliance and “effectiveness” monitoring wells. The Permittee may submit a written request to terminate corrective action measures at individual and specific recovery or in situ treatment locations based on ground water monitoring results. Any partial termination of corrective action measures shall be approved by the Executive Director.

IV.B.2. Upon complete termination of corrective action measures, the Permittee shall perform a complete MHWMR 264 Appendix IX analysis on ground water samples from all compliance monitoring wells to confirm that no additional Appendix IX hazardous constituents have entered the ground water.

IV.B.3. If all or part of the corrective action measures are terminated in accordance with condition IV.B.1., they shall be reinitiated at any time during the post-closure care period that the ground water protection standard has been exceeded at the point of compliance or in any compliance or “effectiveness” monitoring well.

IV.C. LIST OF HAZARDOUS CONSTITUENTS

The Permittee shall conduct corrective measures to remove any constituents specified in condition V.D. in accordance with MHWMR 264.100(a)(1).

IV.D. CONCENTRATION LIMITS

The concentration limits upon which the ground water protection standards shall be met are as specified in Condition V.D. as required under MHWMR 264.94 and 264.100(a)(2).

IV.E. CORRECTIVE ACTION MEASURES

The Permittee shall implement the corrective action measures described in the Corrective Action Program Plan, Permit Attachment C.

IV.F. AREAL EXTENT OF CORRECTIVE ACTION

The Permittee shall remediate and monitor contaminated ground water from the point of compliance to the property boundary and beyond the facility boundary, where necessary to protect human health and the environment, as required under MHWMR 264.100(e).

IV.G. REPORTS

The Permittee shall report the effectiveness of corrective action and compliance monitoring results annually as required under MHWMR 264.100(g). These reports shall be submitted by March 15 of each year, covering the results from the previous calendar year.

IV.H. FINANCIAL ASSURANCE

If changes are made to the Corrective Action Plan, the Permittee shall calculate the anticipated revised corrective action cost, and make any necessary increase in the Financial Assurance for Corrective Action within ninety (90) days of approval by the Executive Director.

IV.I. MODIFICATIONS

IV.I.1. If the Permittee determines that corrective action measures are no longer effective, an application for a permit modification must be submitted within ninety (90) days of such a determination, as required under MHWMR 264.100(h).

IV.I.2. If the ground water protection standard has not been exceeded for a period of three (3) consecutive years in all of the compliance monitoring wells, the Permittee may petition the Executive Director to modify the ground water monitoring as appropriate.

IV.J. OTHER CONDITONS

None.

MODULE V – GROUNDWATER CORRECTIVE ACTION/COMPLIANCE MONITORING PROGRAM

V.A. APPLICABILITY

The requirements of this part apply to the four closed surface impoundments, and the closed land treatment demonstration unit Landfarm and affected adjacent property as depicted in Permit Attachment D.

V.B. MONITORING PROGRAM

The Permittee shall conduct groundwater corrective action/compliance monitoring as outlined herein as required by MHWMR 264.91(a)(1). When the concentrations of hazardous constituents under Condition V.D. have not exceeded the ground water protection standards under Condition V.C. along the point of compliance and in all compliance monitoring wells for a period of three consecutive years, the Permittee may petition the Executive Director for a permit modification to conduct a detection monitoring program.

V.C. GROUND WATER PROTECTION STANDARDS

The ground water protection standards under MHWMR Section 264.92 shall be equal to concentration limits in Condition V.D. of this permit during the compliance monitoring program. The Permittee may petition the Executive Director for a permit modification during the compliance period to establish groundwater protection standards based on alternate concentration limits under MHWMR 264.94(b).

V.D. HAZARDOUS CONSTITUENTS/CONCENTRATION LIMITS

The ground water protection standards in Condition V.C. of this permit shall include the following list of hazardous constituents which have been detected in groundwater or are reasonably expected to be derived from the waste residues in the regulated units, in accordance with MHWMR 264.93, and their concentration limits, as required under MHWMR 264.94, are shown. The analytical methods and method detection limits shall be designated in all reports of analyses. The following hazardous constituents shall be included in ground water quality analyses conducted during compliance monitoring as specified under MHWMR 264.93.

<u>Hazardous Constituent</u>	<u>Concentration Limit, µg/l</u>
2,3,4,6-Tetrachlorophenol	1,100
2,4,6-Trichlorophenol	3.6
2,4-Dichlorophenol	110
2,4-Dimethylphenol	730
2-Methylnaphthalene	122
2-Methylphenol (o-Cresol)	1,800
3-Methylphenol (m-Cresol)*	1,800
4-Methylphenol (p-Cresol)*	180
Acenaphthene	370
Acenaphthylene	2,190
Anthracene	1,800
Benzo(b)fluoranthene	0.092
Benzo(k)fluoranthene	0.92
Carbazole	3.4
Chrysene	9.2
Dibenzofuran	12.0
Fluoranthene	1,500
Fluorene*	240
Naphthalene*	6.2
Pentachlorophenol*	1.0 (MCL)
Phenanthrene*	1,100
Phenol	11,000
Pyrene	180
Ethylbenzene	700 (MCL)
Xylene	10,000 (MCL)

Note: The ACL concentrations in the above table were taken from the Region 9 Preliminary Remediation Goals (PRGs) dated October, 2004. For those constituents not listed in the Region 9 PRGs, MDEQ Tier 1 screening levels were used.

V.E. POINT OF COMPLIANCE

As specified in MHWMR 264.95, the point of compliance for the waste management areas is represented by a vertical surface located at the hydraulically down gradient limit of the waste management area which intercepts the designated compliance point monitoring wells.

V.F. COMPLIANCE PERIOD

The compliance period, during which the ground water protection standard applies, shall be defined to begin with the effective date of this permit and continue until the ground water protection standard for all constituents specified in Permit Condition V.D. have not been exceeded in all of the compliance monitoring wells for a period of three (3) consecutive years.

V.G. GROUND WATER MONITORING PROGRAM

The Permittee shall implement the ground water monitoring programs described in Permit Attachment D, the Corrective Action Plan, and as described in this permit, in accordance with the requirements of MHWMR 264.91 (a)(3) and 264.100. The monitoring program will remain in effect throughout the term of this permit unless the permit is modified under Condition IV.I.2.

V.H. GROUND WATER MONITORING SYSTEM

The Permittee shall maintain a ground water monitoring system to comply with the requirements of MHWMR 264.95, 264.97 and 264.100.

V.H.1. Well Location and Construction

The Permittee shall maintain the existing monitoring system comprised of the wells identified in Figure E-1 of the Corrective Action Program Plan. Additional wells may be installed on an ‘as needed’ basis for the investigation and/or utilization of groundwater remediation technologies, subject to approval by MDEQ.

V.H.2. Well Replacement

Should the Permittee determine during an inspection or sampling event that any well identified in Condition V.H.1. has been damaged such that it no longer meets the requirements of MHWMR 264.97(a)(1), (2) and (c), the Permittee shall notify MDEQ in writing within seven (7) days of making such a determination and replace or repair the damaged well within thirty (30) days. Replacement wells should be constructed to the same specifications as the well being replaced.

V.H.3. Compliance Point Monitoring Wells

Wells WC-22, WC-25, WC-28, WC-29, WC-30, WC-31, WC-33, WC-34, and WC-35 shall be designated as the compliance point monitoring wells.

V.H.4. Corrective Action “Effectiveness” Monitoring Wells

Monitoring wells WC-5, WC-14, WC-19, WC-23, WC-24, WC-40, and/or other wells required under Condition V.H.7. shall be used to monitor the effectiveness of the corrective action program.

V.H.5. Background Monitoring Wells

For the purpose of this permit, monitoring well WC-13 and/or other wells required under Condition V.H.7 shall be designated as the background monitoring wells.

V.H.6. Boundary Control Monitoring Wells

For the purpose of corrective action, wells WC-8, WC-11, WC-26, WC-39, WC-41, WC-44 and/or other wells required under Condition V.H.7 shall be used to monitor the boundary of the plume as defined in Permit Attachment D.

V.H.7. Additional Monitoring Wells

Due to the installation of corrective action measures, and/or the possibility of change in the ground water conditions and/or plume location, it may be necessary to require the construction of additional monitoring wells, change the designation of existing monitoring wells from the corrective action (i.e. compliance, “effectiveness” or background) or delete existing monitoring wells from the corrective action/compliance monitoring ground water monitoring system. The requirement of any such addition, change in designation, or deletion of monitoring wells from the corrective action/compliance ground water monitoring system will be in writing by the Executive Director or by an authorized representative.

V.H.8. Pascagoula formation Monitoring Well

Monitoring well WP-3 shall be used to monitor the Pascagoula formation biennially, beginning within one year of the permit issuance date.

V.I. GROUND WATER MONITORING REQUIREMENTS

The Permittee shall monitor the effectiveness of the corrective action on ground water quality and the ground water flow across the entire extent of the contamination plume as specified in Conditions V.I.1 through V.I.3., as required under MHWMR 264.100.

- V.I.1 The Permittee shall determine the ground water quality at each monitoring well at the frequency and for the parameters specified in Table V-1.

TABLE V-1

<u>Wells</u>	<u>Parameters</u>	<u>Sampling Frequency</u>
All compliance point monitoring wells listed under Condition V.H.3.	All MHWMR 264, Appendix IX parameters	Annually to begin within ninety (90) days after meeting the Ground Water Protection Standard
All monitoring wells listed under Conditions V.H.3., V.H.4., V.H.5., and V.H.6.	All Ground Water Protection Standard Parameters as specified in Condition V.D.	Twice during the life of the permit, year 4 and year 9.
All monitoring wells listed under Conditions V.H.3., V.H.4 and V.H.5.	Parameters denoted by an asterisk* in Condition V.D.	Annually
All monitoring wells listed under Condition V.H.6.	Parameters denoted by an asterisk* in Condition V.D.	Semiannually
Pascagoula formation monitoring well WP-3	Parameters denoted by an asterisk* in Condition V.D.	Biennially

- V.I.2. The Permittee must annually sample one compliance point monitoring well and analyze for all constituents listed in Appendix IX of MHWMR 264, to determine whether additional hazardous constituents are present in the uppermost aquifer. The annual Appendix IX analyses shall rotate among compliance point monitoring wells.

V.I.3. Additional Parameters

If additional MHWMR 264 Appendix IX parameters are found in the compliance point wells, the Permittee shall:

- V.I.3.a. Resample the affected well(s) within (30) days.
- V.I.3.b. Notify the Executive Director in writing within seven (7) days if the presence of additional MHWMR 264 Appendix IX constituents is confirmed.
- V.I.3.c. Add the additional MHWMR 264 Appendix IX constituents which are detected to the list of ground water protection constituents for monitoring, specified under Condition V.D.

V.J. SAMPLING AND ANALYSIS PROCEDURES

- V.J.1. Prior to collecting ground water samples from any monitoring well, the Permittee shall measure the water level in the well, and purge the well using the procedures specified in Attachment D.
- V.J.2. The Permittee shall collect ground water samples in accordance with the procedures set forth in Attachment D.
- V.J.3. All equipment used in ground water monitoring shall be thoroughly cleaned between sampling events and between sampling locations as specified in Attachment D.
- V.J.4. Ground water samples shall be preserved and shipped in accordance with the procedures specified in Attachment D.
- V.J.5. The Permittee shall maintain a field log book and record the sampling information as specified in Attachment D.
- V.J.6. Ground water samples shall be tracked and controlled using the sample identification procedures and chain-of-custody procedures specified in Attachment D.
- V.J.7. Samples shall be analyzed in accordance with the procedures (methods) specified in SW-846, Test Methods for Evaluating Solid Waste, Chemical/Physical Methods.

V.K. ELEVATION OF THE GROUND WATER SURFACE

The Permittee shall determine and record the ground water surface elevation at each monitoring well each time ground water is sampled in accordance with Permit Condition V.G.

V.L. STATISTICAL PROCEDURE

When evaluating monitoring results for hazardous constituents listed in V.D., the Permittee shall compare the measured constituents at each well to the concentration limit specified in Condition V.D.

V.M. MONITORING PROGRAM AND DATA EVALUATION

- V.M.1. The Permittee shall collect, preserve, and analyze ground water samples pursuant to Condition V.J.
- V.M.2. The Permittee shall determine the ground water concentration of hazardous constituent(s) listed in Condition V.D. at compliance and monitoring wells listed in Table V-1 during the compliance period.
- V.M.3. The Permittee shall determine the ground water flow rate and direction in the uppermost aquifer at least annually.
- V.M.4. Pursuant to Conditions V.I.2, the Permittee must annually sample one compliance point monitoring well and analyze for all constituents listed in Appendix IX of MHWMR 264 to determine whether additional hazardous constituents are present in the uppermost aquifer. The annual Appendix IX analyses shall rotate among compliance point wells.
- V.M.5. For each hazardous constituent identified in Condition V.D., the Permittee shall compare the measured constituent concentration, at each compliance well, to the concentration limit specified in Condition V.D. for the compliance monitoring period specified in Condition(s) V.B. and V.C.
- V.M.6. The Permittee shall perform the evaluation required by Condition V.M.5. within sixty (60) days from the receipt and evaluation of the final QA/QC reviewed analytical results.
- V.M.7. Upon completion of the compliance monitoring period, the Permittee may petition the Executive Director for a permit modification to conduct a detection monitoring program as specified in Condition V.B.

V.N. REPORTING AND RECORDKEEPING

- V.N.1. The Permittee shall enter all monitoring, testing, and analytical data obtained pursuant to Part V, in the operating record as required by MHWMR 264.73(b)(6).
- V.N.2. During the period of compliance monitoring and corrective action, the Permittee shall submit the analytical results required by Conditions V.D., V.I. and V.M. in an annual report due by March 15 of the year following completion of the scheduled sampling.
- V.N.3. If the Permittee determines, pursuant to Condition V.G. that the reported concentration at a boundary control monitoring well specified in Condition V.H.6. exceeds the Practical Quantitation Limit (PQL) for the constituent specified in Condition V.D. (indicating that the plume of contamination may be expanding), the Permittee shall resample within (30) days to confirm the concentration of the constituent. If the second analysis confirms that the constituent exceeds the PQL, then the Permittee shall notify the Executive Director in writing seven (7) days from receipt and evaluation of the final QA/QC reviewed analytical results.
- V.N.4. The Permittee shall report concentrations of any additional Appendix IX constituents (i.e. not listed in Condition V.D.) to the Executive Director within seven (7) days from receipt and review of the final QA/QC reviewed analytical results from the re-sampling (i.e. confirmatory) event.

V.O. ASSURANCE OF COMPLIANCE

The Permittee shall assure that monitoring and corrective action measures necessary to achieve compliance with the ground water protection standards are taken during the term of the permit.

V.P. SPECIAL REQUIREMENT IF THE GROUND WATER PROTECTION STANDARD IS EXCEEDED

- V.P.1. The Permittee shall provide the Executive Director annual reports presenting the laboratory analyses for each constituent and for each well sampled in accordance with the permit and indicate which constituents, if any, have exceeded the groundwater protection standard.
- V.P.2. If the Executive Director determines that the existing corrective action plan is insufficient to provide continued protection of human health and the environment, then the Permittee must submit to the Executive Director a permit modification to the corrective

action program meeting MHWMR 264.100 requirements within 180 days.

V.P.3. The Permittee may make a demonstration that the ground water protection standard was exceeded due to sources other than a regulated unit or errors in sampling, analysis or evaluation:

V.P.3.a. The Permittee must notify the Executive Director in writing, within seven (7) days of receipt and evaluation of QA/QC reviewed analytical results, that a demonstration will be made.

V.P.3.b. The Permittee must submit a report to the Executive Director, within 90 days, that demonstrates that a source other than a regulated unit caused the ground water protection standard to be exceeded or that the apparent non-compliance was a result of an error in sampling, analysis or evaluation.

V.P.3.c. The Permittee must continue the corrective action/compliance monitoring program in accordance with MHWMR 264.99 and 264.100.

V.P.4. If the Permittee or the Executive Director determines that the corrective action/compliance monitoring program no longer satisfies the requirements of MHWMR 264.99 and/or 264.100, the Permittee must submit a permit modification application within 90 days of the determination detailing appropriate changes to the compliance monitoring program.

V.Q. REQUEST FOR PERMIT MODIFICATION

V.Q.1. If the Permittee or the Executive Director determines the ground water protection standard is being exceeded at a boundary monitoring well specified in Condition V.H.6., the Permittee shall submit to the Executive Director an application for a permit modification to establish a revised corrective action program.

V.Q.2. If the Permittee or the Executive Director determines the compliance monitoring program no longer satisfies the requirements of MHWMR 264.99, the Permittee must submit an application for a permit modification, within 90 days, to make any appropriate changes to the program.

MODULE VI – PHASE II RCRA ORGANIC AIR EMISSION REQUIREMENTS

VI.A. GENERAL INTRODUCTION

On December 6, 1994, EPA published the final rule for Phase II Organic Air Emissions Standards (40 CFR Parts 264 and 265, Subpart CC) for hazardous waste treatment, storage, and disposal facilities, including certain hazardous waste generators accumulating waste on-site in RCRA permit-exempt (90-day) tanks and containers. In general, under these standards, air emissions controls must be used for tanks, surface impoundments, containers and miscellaneous units which contact hazardous waste containing an average organic concentration greater than 500 ppm at the point of origination determined by the procedures outlined in 40 CFR § 264.1083(a), except as specifically exempted under 40 CFR § 264.1080 and § 264.1082.

VI.B. ORGANIC AIR EMISSION STANDARDS

Prior to installing any tank, container, surface impoundment or miscellaneous unit subject to 40 CFR Part 264, Subpart CC, or modifying an existing process, waste handling or tank or container such that the unit(s) will become subject to 40 CFR Part 264 Subpart CC, the Permittee shall apply for a permit modification under § 270.42, and provide specific Part B application information required under 40 CFR §§ 270.14-17 and § 270.27, as applicable, with the modification request.

MODULE VII – LAND DISPOSAL RESTRICTIONS

VII.A. GENERAL RESTRICTIONS

MHWMR 268 identifies hazardous wastes that are restricted from land disposal and defines those limited circumstances which an otherwise prohibited waste may continue to be placed on or in a land treatment, storage or disposal unit. The Permittee shall maintain compliance with the requirements of MHWMR 268. Where the Permittee has applied for an extension, waiver or variance under MHWMR 268, the Permittee shall comply with all restrictions on land disposal under this Module once the effective date for the waste has been reached pending final approval of such application.

VII.B. LAND DISPOSAL PROHIBITIONS AND TREATMENT STANDARDS

- VII.B.1. A restricted waste identified in MHWMR Part 268, Subpart C may not be placed in a land disposal unit without further treatment unless the requirements of MHWMR 268, Subparts C and/or D are met.
- VII.B.2. The storage of hazardous wastes restricted from land disposal under MHWMR 268 is prohibited unless the requirements of MHWMR 268, Subpart E are met.

MODULE VIII – ORGANIC AIR EMISSIONS REQUIREMENTS OF PROCESS VENT AND EQUIPMENT LEAKS

VIII.A. GENERAL INTRODUCTION

In the June 21, 1990, Federal Register, EPA published the final rule for Phase I Organic Air Emission Standards (40 CFR Parts 264 and 265, Subparts AA and BB) for hazardous waste treatment, storage and disposal facilities. The State of Mississippi adopted these regulations in September, 1990. Subpart AA contains emission standards for process vents associated with distillation, fractionation, thin-film evaporation, solvent extraction and air or steam stripping operations that process hazardous waste with an annual average total organic concentration of at least ten (10) part per million (ppm) by weight. Subpart BB contains emission standards that address leaks from specific equipment (i.e. pumps, valves, compressors and etc.) that contains or contacts hazardous waste that has an organic concentration of at least ten (10) percent by weight.

VIII.B. ORGANIC AIR EMISSION STANDARDS

Prior to constructing any equipment with process vents subject to the requirements of MHWMR 264, Subpart AA or installing any additional equipment subject to the requirements of MHWMR 264, Subpart BB, the Permittee shall supply the specific Part B information required pursuant to MHWMR 270.24 and 270.25, as applicable.

MODULE IX – WASTE MINIMIZATION

IX.A. APPLICABILITY

No less than one year from the date of the future generation of hazardous waste and pursuant to MHWMR 264.73(b)(9); Section 3005(h) of RCRA, 42 U.S.C. 6925(h); and Section 49-31-1 et seq., Mississippi Code of 1972; the Permittee must certify, no later than annually, that:

- IX.A.1. The Permittee has a program in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the Permittee to be economically practicable; and
- IX.A.2. The proposed method of treatment, storage or disposal is the most practical method available to the Permittee which minimizes the present and future threat to human health and the environment.

IX.B. WASTE MINIMIZATION CERTIFICATION OBJECTIVES

Any future waste minimization program under Condition IX.A should include the following elements:

A. Top Management Support

- i. Dated and signed policy describing management support for waste minimization and for implementation of a waste minimizing plan.
- ii. Description of employee awareness and training programs designed to involve employees in waste minimization planning and implementation to the maximum extent feasible.
- iii. Description of how a waste minimization plan has been incorporated into management practices so as to ensure ongoing efforts with respect to product design, capital planning, production operations and maintenance.

B. Characterization of Waste Generation

Identification of types, amounts and hazardous constituents of waste streams with the source and date of generation.

C. Periodic Waste Minimization Assessments

- i. Identification of all points in a process where materials can be prevented from becoming a waste, or can be recycled.
- ii. Identification of potential waste reduction and recycling techniques applicable to each waste, with a cost estimate for capital investment and implementation.
- iii. Specify performance goals, preferably quantitative, for the source reduction of waste by stream. Whenever possible, goals should be stated as weight of waste generated per standard unit of production, as defined by the generator.

D. Cost Allocation System

- i. Identification of waste management costs for each waste, factoring in liability, transportation, recordkeeping, personnel, pollution control, treatment, disposal, compliance and oversight to the extent feasible.
- ii. Description of how departments are held accountable for the wastes they generate.
- iii. Comparison of waste management costs with costs of potential reduction and recycling techniques applicable to each waste.

E. Technology Transfer

Description of efforts to seek and exchange technical information on waste minimization from other parts of the company, other firms, trade associations, technical assistance programs, and professional consultants.

F. Program Evaluation

- i. Description of types and amounts of hazardous waste reduced or recycled.
- ii. Analysis and quantification of progress made relative to each performance goal established and each reduction technique to be implemented.
- iii. Amendments to waste minimization plan and explanation.

- iv. Explanation and documentation of reduction efforts completed or in progress before development of the waste minimization plan.
- v. Explanation and documentation regarding impediments to hazardous waste reduction specific to the individual facility.

IX.C. RECORDKEEPING AND REPORTING

- IX.C.1. Annually, the Permittee shall submit a certification report of the types and quantities of waste generated, and the types and quantities of waste reduced/minimized. This certified report shall include a narrative study explaining the waste generated and minimization data, a description of goals and progress made in reducing/minimizing the generation of wastes, and a description of any impediment to the reduction and minimization of waste.
- IX.C.2. The Permittee shall maintain copies of this certification in the facility operating record as required by MHWMR 264.73.